

Delaware Program Plan

Discussion with the Council
October 14, 2015

Program Analysis Methodology

- ▶ Characterized each aggregated measure using Mid-Atlantic TRM.
- ▶ Custom measures characterized by end use based on past program experience.
- ▶ Screened each measure to ensure cost-effectiveness
- ▶ Set participations based on past program experience, program design plans, and professional judgement
- ▶ Screened program to find TRC ratios and benefits

Data sources

- ▶ Measure characterizations
 - Mid-Atlantic TRM Version 5.0
 - Delaware TRM
 - Pertinent EM&V research findings
 - Program experience
- ▶ Avoided Costs from DE Potential Study – need to be updated
- ▶ Discount rate and other screening assumptions same as DE Potential Study

Categories of Benefits

- ▶ Avoided Electric Energy Costs for Summer and Winter On- and Off-Peak
- ▶ Summer Capacity Avoided Costs
- ▶ Avoided T&D Costs
- ▶ Avoided Or Increased Gas Costs
- ▶ Avoided Oil Costs
- ▶ Avoided Water and Disposal Costs
- ▶ Avoided Operation and Maintenance Costs
- ▶ Did not include DRIPE, regulation compliance costs, environmental externalities, etc.

Analysis Example

	NUMBER		
MEASURE	2016	2017	2018
Relamp/Reballast T8 to HP T8	8,000	4,000	2,000
HP T8 Fixture	2,000	1,000	500
HP T8 High Bay Fixture	1,000	1,000	900
T5 Troffer Fixture	100	90	80
T5 HO High Bay Fixture	800	800	700
LED screw based lamps	15,250	16,500	17,750
LED Interior, Pendant, Recessed, Surface	1,500	2,500	3,500
LED Track Lighting	2,200	3,000	3,800
LED Refrigerated/Freezer Case Fixtures	1,500	2,500	2,500
LED Display Case Fixtures (ft)	100	1,000	2,000
LED Interior Panel, Troffer	6,000	6,600	7,000
LED High and Low Bay Fixtures	2,800	3,086	3,585
LED Exit Signs	1,500	1,000	500
LED Exterior Parking Lot Fixtures	3,200	3,483	3,850
LED Wall Packs	1,000	1,500	2,000
LED Flood and Spot Fixtures	3,000	3,500	4,000

Output Tables Example

Row Labels	Sum of kWh Benefits (\$)	Sum of Summer Capacity Benefits (\$)	Sum of Natural Gas Benefits (\$)	Sum of Total Other Resource Benefits (\$)	Sum of Total Non Resource Benefits (\$)	Sum of Total Benefits (\$)
2016	\$ 27,147,617	\$ 2,501,253	\$ (445,004)	\$ -	\$ 3,345,015	\$ 36,541,807
C&I	\$ 27,147,617	\$ 2,501,253	\$ (445,004)	\$ -	\$ 3,345,015	\$ 36,541,807
EEIF	\$ 27,147,617	\$ 2,501,253	\$ (445,004)	\$ -	\$ 3,345,015	\$ 36,541,807
Low Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Weatherization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 27,365,806	\$ 2,459,322	\$ (440,953)	\$ -	\$ 3,617,683	\$ 36,878,114
C&I	\$ 27,365,806	\$ 2,459,322	\$ (440,953)	\$ -	\$ 3,617,683	\$ 36,878,114
EEIF	\$ 27,365,806	\$ 2,459,322	\$ (440,953)	\$ -	\$ 3,617,683	\$ 36,878,114
Low Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Weatherization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 27,703,760	\$ 2,401,276	\$ (443,845)	\$ -	\$ 3,903,039	\$ 37,348,001
C&I	\$ 27,703,760	\$ 2,401,276	\$ (443,845)	\$ -	\$ 3,903,039	\$ 37,348,001
EEIF	\$ 27,703,760	\$ 2,401,276	\$ (443,845)	\$ -	\$ 3,903,039	\$ 37,348,001
Low Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Weatherization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total	\$ 82,217,183	\$ 7,361,852	\$ (1,329,802)	\$ -	\$ 10,865,737	\$ 110,767,922

Key Uncertainties and Next Steps

▶ Avoided costs

- What categories of benefits do we include?
- Do values differ by AEP, or can there be a common statewide set?

▶ Net-to-Gross Ratios

- ▶ For EEIF, program budget and design may change significantly
- ▶ Certain Programs may require iterative process to integrate with other programs